

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions of claims in the application.

Listing of Claims

1-24. (canceled)

25. (previously presented) A process of producing a multilayer printed wiring board, comprising the steps of:

(a) providing a photosensitive glass substrate;

(b) forming through holes by irradiating light onto through-hole portions of the glass substrate through a mask so as to create a latent image corresponding to the exposed portions, and then removing glass of the exposed portions;

(c) crystalizing the glass substrate having the through holes formed, by applying heat-treatment thereto;

(d) forming a plurality of insulating layers and wiring layers on each of opposite surfaces of the crystalized glass substrate; and

(e) coating the through holes with a conductive film to provide conductive connection between the opposite surfaces of the glass substrate.

26-50. (canceled)

51. (NEW) A printed wiring board comprising:

a glass substrate having a through hole connecting opposite surfaces thereof;

a wiring layer formed on each of the surfaces of said glass substrate; and

a conducting portion having a conductive film formed on an inner wall surface of the through hole and providing conductor connection between the opposite surfaces of said glass substrate,

wherein the conductive film has a thickness of 1 to 20 μm .

52. (NEW) The printed wiring board according to claim 51, wherein the wiring layer on at least one of the surfaces of said glass substrate comprises surface conducting areas,

whereby contacts of a chip are connectable to the surface conducting areas.

53. (NEW) The printed wiring board according to claim 51, wherein said glass substrate comprises glass modified to have a coefficient of thermal expansion close to that of metal, whereby disconnection of the wiring layers is prevented.

54. (NEW) The printed wiring board according to claim 53, wherein said glass substrate comprises crystalized glass, whereby the printed wiring board has the coefficient of thermal expansion close to that of metal, whereby disconnection of the wiring layers is prevented.

55. (NEW) A printed wiring board comprising:
a glass substrate having a through hole connecting opposite surfaces thereof;
a wiring layer formed on each of the surfaces of said glass substrate; and
a conducting portion having a conductive film formed on an inner wall surface of the through hole and providing conductor connection between the opposite surfaces of said glass substrate,

wherein a protective layer is formed so as to cover at least the conductive film.

56. (NEW) The multilayer printed wiring board according to claim 55, wherein the wiring layer on at least one of the surfaces of said glass substrate comprises surface conducting areas, whereby contacts of a chip are connectable to the surface conducting areas.

57. (NEW) The multilayer printed wiring board according to claim 55, wherein said glass substrate comprises glass modified to have a coefficient of thermal expansion close to that of metal, whereby disconnection of the wiring layers is prevented.

58. (NEW) The multilayer printed wiring board according to claim 57, wherein said glass substrate comprises crystalized glass, whereby the printed wiring board has the coefficient of thermal expansion close to that of metal, whereby disconnection of the wiring layers is prevented.

59. (NEW) The multilayer printed wiring board according to claim 51 or 55, wherein the conductive film comprises a film continuous with the wiring layer.

60. (NEW) The multilayer printed wiring board according to claim 51 or 55, wherein the wiring layer has a land width of 10 μm or less.

61. (NEW) The multilayer printed wiring board according to claim 51 or 55, wherein the through hole is filled with a protective film.

62. (NEW) The multilayer printed wiring board according to claim 51 or 55, wherein the through hole has a diameter of 30 to 150 μm .

63. (NEW) The multilayer printed wiring board according to claim 51 or 55, wherein the surfaces of the glass substrate and at least part of the wall surface of the through hole are covered with an ion blocking layer mainly comprising an insulating film.

64. (NEW) The multilayer printed wiring board according to claim 51 or 55, wherein an adhesion-reinforcing layer is interposed between the wiring layer and the glass substrate to enhance force of adhesion between the wiring layer and the glass substrate.

65. (NEW) The multilayer printed wiring board according to claim 51 or 55, wherein the glass substrate comprises photosensitive glass.

66. (NEW) The multilayer printed wiring board according to claim 51 or 55, wherein a wiring pattern formed of the wiring layer has a line width of 3 to 50 μm .

67. (NEW) The multilayer printed wiring board according to claim 51 or 55, further comprising an adhesion-reinforcing layer interposed between the wiring layer and the corresponding surface of said glass substrate.